

REMARKS / ARGUMENTS

Claims 1-13 remain pending in this application. No claims have been canceled or added.

Priority

Applicants appreciate the Examiner's acknowledgment of the claim for priority. Submitted herewith is a certified copy of the corresponding Japanese patent application (JP 2003-118528, filed April 23, 2003). An indication that this document has been safely received would be appreciated.

Claim Objections

Claim 9 has been amended as suggested by the Examiner.

35 U.S.C. §§102 and 103

Claims 1-8 and 12 stand rejected under 35 U.S.C. §102(e) as being anticipated by Muljono et al (U.S. Patent No. 6,538,464). Claims 9-11 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Muljono et al. These rejections are traversed as follows.

The present invention is directed to a semiconductor integrated circuit having an output circuit with plural output MOSFETs connected in parallel. A first control

means selects the number of output MOSFETs that are to be turned ON to control output impedance. A second control means, that is capable of performing independently of the first control means, controls slew rate by controlling a drive signal of the output MOSFETs that are turned ON. Therefore, the adjusting of impedance and the adjusting of the slew rate are independent from one another. The impedance can be kept constant for any output voltage. The impedance depends upon the number of MOSFETs being in the output buffer but not on the combination of MOSFETs that are turned ON. The slew rate is kept constant by controlling a timing when each of the MOSFETs in the output buffer is turned ON.

On the other hand, Muljono et al discloses an output buffer 101 in Fig. 1 having a feature that adjusting a slew rate is dependent upon adjusting an impedance. The slew rate is adjusted in accordance with the number of MOSFETs in the output buffer. However, Muljono et al do not disclose or suggest any first control means for controlling output impedance or second control means for controlling slew rate which are capable of performing independently of each other. According to Muljono et al, the slew rate can fluctuate according to environmental conditions such as temperature even if the impedance is kept constant, because the impedance can fluctuate according to environmental conditions even if the number of MOSFETs that are turned ON is kept constant.


Therefore, it is submitted that the pending claims patentably define the present invention over Muljono et al. The Examiner is hereby invited to contact the undersigned by telephone with any questions.

Conclusion

In view of the foregoing, Applicants respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

By 
Shrinath Malur
Reg. No. 34,663
(703) 684-1120